FREQUENTLY ASKED QUESTIONS (FAQs)

Investing in Resilient Infrastructure:

Development and Management of a Resilient Open Access Underground Conduit System

Notice of Funding Availability (NOFA)

Version 2.0

Publication Date: **November 8, 2024**

Overview

The Frequently Asked Questions (FAQs) included in this document are for informational purposes only. They are designed to provide guidance and support to potential Applicants, aiding in understanding the **Investing in Resilient Infrastructure: Development and Management of a Resilient Open Access Underground Conduit System** and the application requirements set forth in the NOFA.

The FAQs do not and are not intended to supersede, modify, or otherwise alter applicable statutory or regulatory requirements or the specific application requirements set forth in the NOFA. It is crucial to remember that in all cases, statutory and regulatory mandates and the requirements set forth in the NOFA shall prevail over any inconsistencies contained in the FAQs below.

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Application and Technical Assistance

1. How do you register as an applicant?

   To be considered a Registered Applicant and receive technical assistance for this NOFA, the Applicant must email info@smartisland.pr.gov by October 18, 2024, at 4:30 p.m.

NOFA General Terms and Conditions

1. Who will own the new conduit system?

   The Puerto Rico Government will own the conduit network. This project is considered a Public Private Partnership (P3), with the Puerto Rico Government providing funding and the Applicant providing design, construction, and operational services.

2. How does the NOFA satisfy BEAD requirements to select a sub-grantee and make a sub-award? 2 CFR 200.331 differentiates between subcontractors and subgrantees, and BEAD requires sub-grantees that will have a Federal financial assistance relationship.

   The opportunity is for the selection of a sub-grantee in accordance with the NTIA BEAD NOFA.

3. Can Applicants apply for all phases, or can they apply for a single phase?

   Per the NOFA Introduction Section language published on October 23, 2024, 'The Government Entities invite Applicants to submit their proposals to all Phases or a single Phase of this NOFA.' The PRBP believes that the Design-Build-Operate is the most cost-effective method with a single entity. However, applicants can apply for the Phase(s) they choose.

4. What is the timeline for the project to start?

Upon NTIA approval of the PRBP's Final Proposal, the selected sub-recipient will be notified, and award documents will be issued. The executed award documents for this NOFA initiate the project's start.

5. Do you want the applicants to provide underground conduit only?

   Per the NOFA Sub Phase 1.1 Plan and Design language published on October 23, 2024, 'Aerial fiber builds may be considered, but only in Highly Specialized and Unique Circumstances. For this NOFA, the term Highly Specialized and Unique Circumstances refers to very specific situations that are impractical or unfeasible in deploying the new conduit system after consultation with the Government Entity.'

6. Will the NOFA consider buying from anywhere, or will we need to follow Build America, Buy America (BABA), excluding purchases from China?

   BABA requirements apply per the Broadband Equity, Access, and Deployment (BEAD) NOFO published by the NTIA, which is the funding source for this NOFA. All waivers published by the NTIA are applicable to this NOFA.

7. Does the stated budget of $175M cover design and build only?

   Per the NOFA Funding Disbursement and Allowable Use of Funds language published on October 23, 2024, 'During Phase 3, no funding related to ongoing costs of Operations and Maintenance (O&M) will be available. It is intended that operation and maintenance are to be covered by the conduit network leasing income.

   Puerto Rico reserves the right to determine the number of awards as deemed appropriate, which may include an allocation for start-up costs related to the initiation of O&M activities.

8. Is the conduit route based on connections decided by the ISPs, including the marine connections?

   The conduit route will be selected based on the Phase 1 concept plans presented by the engineer. The engineer will take the ISP's comments and

desires into account, including CAIs, while designing the conceptual routes. PRBP will approve the final conceptual plan, which will be the basis of the design and final construction.

9. NOFA states it should be a redundant network, but you speak to deduplication. Please explain.

   The interconnection with the submarine cable landing sites will be redundant to promote the hardening of the Island's broadband infrastructure. Using the responses received during the RFI process, any existing infrastructure that meets the needs and requirements of the project will be considered for use to reduce duplication.

10. The Applicant does not have all the information in the pre-construction phases description. What happens if additional information is learned as the project progresses?

    Additional information obtained as the design progresses will be used to validate the selected route. If information dictates changes in the concept selected, adjustments can be made in coordination with the PRBP Program office.

11. Is permitting flexible as it relates to the timeline and schedule?

    Per the Conduit NOFA Addendum published October 23, 2024, Appendix 1, Phasing Responsibilities, Pre-Construction Planning Phase page 32, 'During this phase, the Applicants will work with the Government Entities to identify the primary anchor sites to be served with the conduit system and examine existing rights-of-way (ROW) for potential use in order to expedite the construction. The use of existing public ROWs, when possible, is an effective use of time and resources, limits the need for permitting, and may often simplify construction. However, it is anticipated that there may be times when it is necessary to depart from existing public ROWs. The Applicant will be responsible for obtaining easements or other conveyance document for this departure'. Permits must be in place prior to construction starting. If phased or regional construction is utilized, permits for each region must be in place prior to beginning construction.

12. What is meant by "Multiple access to the ducts for users"?

    Per the Conduit NOFA Addendum published October 23, 2024, Appendix 1, Phasing Responsibilities, Pre-Construction Planning Phase page 31, 'This foundation will be based on the intent defined in this NOFA to establish a high-density conduit system that allows for multiple users and integrates the transmission network effectively, ensuring significant benefits for the existing industry.' The concept is that the conduits will be leased to multiple users based on the business model presented for the operation and maintenance of the conduit network.

13. Volume 2 of the Initial Proposal set forth a process under which an engineering firm first would work on and prepare the design of the proposed conduit network, and proponents would subsequently present proposals for the construction and operation of the conduit network based on that design. The Amended NOFA appears to propose a different process altogether without mentioning Volume 2 of the Initial Proposal. Can the PRBP please (a) confirm that the process set forth in the NOFA indeed is a modification of the process set forth in Volume 2 of the Initial Proposal; (2) explain why the change was made at this juncture; and (3) disclose whether NTIA approved this change to the procedures approved in Volume 2 of the Initial Proposal?

    The Initial Proposal Volume 2 (IPV2) contemplated a design and then construction process. When reviewing the timeline required to complete a design, accept and review grant applications for the construction and operations of the conduit network, and complete the Final Proposal, it was determined that it was not possible to follow this course and meet the 365-day NTIA requirement for the Final Proposal submittal. After discussions with NTIA, it was determined that utilizing a design-build process met the IPV2 requirements.

14. Has the PRBP or any other agency of the Government of Pue1to Rico conducted a viability study for the proposed conduit network? If so, can the PRBP publish that document?

    No study is available.

15. The Amended NOFA makes several references to what it calls the "Smart Island Broadband Network," but it does not define the term.1 In some instances, the NOFA appears to distinguish this "Smart Island Broadband Network" from the buried conduit system. See, e.g., Amended NOFA at l O ("The management, operation, and maintenance of the conduit system will be instrumental in the success of the Smart Island Broadband Network."). In other instances, the NOFA suggests that the conduit system it proposes to build with funds from the BEAD Program would be used, at least in part, for the benefit of the "Smart Island Broadband Network." See, e.g., Amended NOFA at 3; ;d. at 6. Meanwhile, the PRBP explained in at least one of its webinars that the conduit network it proposes to build would not include dark fiber or the deployment of lit fiber to offer broadband internet access service. Can the PRBP please explain what is the "Smart Island Broadband Network" and its relationship to the buried conduit system the PRBP is proposing to build with funds from the BEAD Program?

    The intention of the NOFA and project is that the conduit network will result in the creation of the Smart Island Broadband Network by virtue of the conduits' use by independent ISPs providing service to unserved and underserved locations and CAIs.

16. The Amended NOFA makes reference to a "network" that will "provide a minimum one- gigabit symmetrical lit service to community anchor institutions (CAIs), such as public schools, public or multi-family housing, libraries, medical or healthcare providers, community colleges or other higher education institutions, and any other nonprofit or governmental community support organization, collectively, CAIs, where a need is identified in near proximity to the Smart Island Broadband Network," Amended NOFA at 7-8. It is not clear to which "network" the PRBP is referring. Can the PRBP please explain?

    The complete statement includes "*the vision for the multi-duct conduit system is* to *provide* a minimum of one-gigabit symmetrical…". The intention is for the conduit to promote the extension of gigabit fiber optic service to the unserved and underserved locations and CAIs on the Island.

17. The process set forth in the Amended NOFA contemplates that the design of the buried conduit network will be performed by the winning proponent during the initial phases of the project ("Pre-Construction Planning Phase"

and "Design Phase") after, among other things, conducting "discovery," coordinating with the PRBP, interviewing ISPs, and reviewing the data from responses to the Expression of Interest and Request for Information that the PRBP has issued. See Amended NOFA at 6; id. at 37. The Amended NOFA also indicates that proposals must include total project costs for the construction and operation phases. That suggests that proponents would be compelled to project costs, assume details of the proposed conduit network (such as its extension), and propose a leasing rate for a conduit network that has not been designed and the details of which will not be defined until after a proponent selected. How are proponents supposed to estimate costs and build proposals based on these estimates when there is no reference design today and, per the Amended NOFA, the design will be influenced by decisions and events that will not take place until after a proponent is selected?

It is expected that the applicant will work closely with their engineering and suppliers' partners to develop the pricing to be presented in the application.

18. The Amended NOFA refers in several instances to "open access" but does not define the term (beyond indicating that it should allow for multiple users). How is the PRBP defining "open access" in this context? Are there any regulatory standards or legal requirements of any kind that would apply to the operator of the conduit network to ensure that the "open access" contemplated by the PRBP materializes?

    The open access conduit network will be a non-discriminatory conduit network where the physical infrastructure operation is separated from any services provided over it. This means that the conduit network operator does not supply services directly; instead, multiple service providers are afforded the opportunity to use the same conduit network under the same conditions and requirements to offer their services to end-users. The open access model intends to prevent a single entity from monopolizing the conduit, creating a level playing field, and fostering a dynamic market environment.

    If a service provider is the applicant and is proposing to operate the conduit network, an explanation of how they will separate the conduit network

operation from their service operations must be provided to ensure neutrality.

19. The Amended NOFA indicates that internet service providers ("ISPs") may submit proposals for the design, construction, and operation of the proposed buried conduit network. The PRBP has confirmed it in the webinars it conducted. What specific requirements and/or restrictions will apply to an ISP that is selected to design, construct and/or operate the network does not have an undue advantage over its competitors? What specific requirements and/or restrictions will apply to ensure that the ISP in that scenario does not use information acquired from its competitors (or information about its competitors that it acquires from the PRBP and/or its consultants) during the design and construction phases to exact an undue advantage over its competitors?

    Each sub-phase of the network's engineering design will require the approval of the PRBP to ensure that the intentions of the NOFA are met.

20. The Amended NOFA indicates that one of the objectives of the proposed buried conduit system is to "include multiple routes to ensure redundancy," Amended NOFA at 17. The Amended NOFA also states that the buried aims to "minimize redundancy," id. at 29, and limit "the duplication of existing broadband services and the prevention of overbuilding," id. at 37-38. Can the PRBP please reconcile this seemingly inconsistent objectives? How can the PRBP promote redundancy of broadband infrastructure while simultaneously minimizing overbuilding in areas where broadband infrastructure currently exists?

    The interconnection with the submarine cable landing sites will be redundant to promote the hardening of the Island's broadband infrastructure. Using the responses received during the RFI process, any existing infrastructure that meets the needs and requirements of the project will be considered for use to reduce duplication.

21. Who will be the owner of the assets that will be part of the buried conduit system during the construction phase, the operation phase, and after the conclusion of the initial operations agreement term?

The Puerto Rico Government will own the conduit network. This project is considered a Public Private Partnership (P3), with the Puerto Rico Government providing funding and the Applicant providing design, construction, and operational services.

22. The Amended NOFA does not identify the consultants to the PRBP or any other agency of the Government of Puerto Rico that have provided or are currently providing advice to the PRBP as it relates to the BEAD Program, the Amended NOFA, and the overall project proposing to build a buried conduit network. Nor has the Amended NOFA identify any restricted entities. The PRPB should amend the Amended NOFA to (1) identify consultants to the PRBP or any other agency of the Government of Puerto Rico that have provided or are currently providing advice to the PRBP as it relates to the BEAD Program and (2) designate them as restricted entities that cannot be part of any proponent group submitting a proposal or provide advice to any proponent or proponent group regarding the project.

    PRBP will take all means necessary to prevent collusion and conflicts of interest. No Department of Commerce or PRBP consultants may work on projects that they are consulting on, including any of the BEAD program projects.

23. Clarity on Costs and Financing: Are there specific details on how funds will be adjusted if the project scope changes during development?

    The proposed cost submitted with the application considers the funding that PRBP is obliged to provide. No additional funding for the project is anticipated.

24. Strategies to Encourage the Inclusion of Local Companies: Will there be specific support to promote the participation of small local businesses or subcontractors with limited economic capacity in the project?

    Per the NOFA Introduction Section language published on October 23, 2024, 'The Government Entities invite Applicants to submit their proposals to all Phases or a single Phase of this NOFA.' The PRBP believes that the Design-Build is the most cost-effective method with a single entity. However, applicants can apply for the Phase(s) they choose. It is acceptable

for a joint venture or partnership to come in as a single applicant – a team coming together to respond to all the phases. The anticipated regional construction will foster the use of smaller sub-contractors for the work.

25. Could the project be divided into smaller phases or components to make participation feasible for these subcontractors?

    The applicant is required to submit an application for the full project or the full phases of the project. The NOFA encourages the division of the project into distinct regions to facilitate parallel construction and accelerate the overall timeline.

26. Criteria for Evaluating Financial Solvency and Stability: What will be the minimum criteria for economic solvency for subcontractors or small businesses wishing to participate?

    The Applicant will be required to provide two (2) years of audited financial statements and a 5-year financial pro forma comprised of balance sheets, income statements, and cash flow statements as a part of the application.

27. Are there support mechanisms, such as partial financing or advance payments, to help these companies meet the requirements?

    The NOFA Funding Disbursement and Allowable Use of Funds and Requirements Sections 1.5 Allowable Use of Funds, 1.6 Compliance, and Payment Terms and Methods published on October 23, 2024, provide expectations for payments and methods for this project based on certain federal terms and conditions for federal grants, including any applicable circulars issued by the US Government's Office of Management and Budget (US-OMB) or other federal agencies. The Government Entities, through PRBP, anticipates that some or all of the costs incurred under this grant award pursuant to this NOFA will be funded partially and/or in whole with federal funds.

    The NOFA provides for reimbursement for completed work on a quarterly basis.

28. Workforce Training and Development Requirements: To align with workforce development goals, will hiring of local workers or specific training program graduates be required or incentivized?

    The Fair Labor Practices and Workforce Development and Job Quality Scoring Criteria outline these requirements.

29. Are there expectations regarding the use of specific certifications or credentials for workers in the various phases of the project?

    The Fair Labor Practices and Workforce Development and Job Quality Scoring Criteria outline these requirements.

30. Section “2. Scope of Work, Project Objectives & Outcomes”, in “Phase 1. Plan, Design and Engineering”, mentions the following: “This network will promise to provide a minimum one-gigabit symmetrical lit service for public schools, public or multi-family housing, libraries, medical or healthcare providers, community colleges or other higher education institutions, and any other nonprofit or governmental community support organization, collectively, CAIs, where a need is identified in near proximity to the Smart Island Broadband Network.” Our understanding is that this program aims to develop a conduit system, not a fiber optic installation. Please clarify.

    The goal is to build the conduit network close to the CAIs, not to provide direct service to the CAIs. The plan is to get as close to the CAIs as possible, allowing for service through providers once the conduit is complete.

31. In page 11 of 45, “Ineligible Activities and Costs”, bullet #3 states: “Operating costs related to the operation and maintenance of the Smart Island Broadband Network conduit network”. Please Clarify.

    Per the NOFA Funding Disbursement and Allowable Use of Funds language published on October 23, 2024, 'During Phase 3, no funding related to ongoing costs of Operations and Maintenance (O&M) will be available. It is intended that operation and maintenance are to be covered by the conduit network leasing income.

Puerto Rico reserves the right to determine the number of awards as deemed appropriate, which may include an allocation for start-up costs related to the initiation of O&M activities

32. In page 11 of 45, "Ineligible Activities and Costs", bullet #4 states: "The purchase of towers, land, or buildings, or building renovations". Please Clarify, considering the inclusion of Data Centers and the possibility of renovations at Landing Stations.

    The construction of data centers is not part of this NOFA, nor is the work associated with the landing sites. The preliminary landing station locations are identified as Ponce, San Juan, Humacao, and Aguadilla. However, these sites are subject to change based on further analysis, and their final selection will depend on the results.

33. Where can we find information on current conduits belonging to government and private entities that provide access and hosting services for ISP networks on the island today?

    The PRBP is currently seeking potential use of the conduit network through its Expression of Interest (EOI) and Request for Information (RFI). In the absence of responses to the EOI and RFI, the PRBP will consider that reasonable efforts have been made to gather the necessary information and will conclude that there is no overbuild due to the lack of available data.

34. Why is it requested in the NOFA to guarantee a symmetrical 1Gbps connection for each of the CAIs (anchor sites), if this is a duct project? In any case, the service will be provided by the ISPs that use the infrastructure to be built. Or is it necessary to additionally install fiber in one of the ducts and place the necessary equipment to illuminate it and deliver it to each of the CAIs?

    The NOFA includes the statement that the vision for the multi-duct conduit system is to provide a minimum of one gigabit symmetrical service. The intention is that the conduit will promote the extension of gigabit fiber optic service to the unserved and underserved locations and CAIs on the Island.

35. Is it possible to obtain information from PRBP on the current state of community needs? Or should we develop a prior approach strategy to the proposal in order to understand it directly from its stakeholders?

    Per the NOFA Introduction, 'The comprehensive approach described in this NOFA requires the applicant to demonstrate extensive knowledge of and a strong desire to partner with Puerto Rico and its residents.' Per Phase 1, 'During this phase, the Applicant will be tasked with designing a strategic buried, fiber conduit route, and deployment blueprint for the Smart Island Broadband Network. Capturing the current landscape of broadband infrastructure and environmental and regulatory compliance requirements of Puerto Rico while reflecting local, cultural, geographic, economic, and infrastructure development plans will require discovery and analysis. Performance of discovery, prior to planning and design, through the use of surveys and analysis, identifies potential usable infrastructure or barriers to site locations, ensuring the most feasible, efficient, and longest-lasting conduit system pathway'.

    The applicant should provide details on how they will gather the community and stakeholder needs to comply with the design requirements.

36. How many operators does Smart Island project will be able to use each section of the network? Although the number of operators currently operating on the island is known, the idea is not to leave an oversized project in which the recovery of the investment will be an impossible challenge to meet.

    The PRBP is currently exploring the potential use of the conduit network through its Expression of Interest (EOI) request. There is no current information available regarding the future use of the conduit network.

37. Where can we find contact information for Witt O'Brien's LLC to request information about the current infrastructure?

    After an award is made, the engineering designer will be provided with applicable current infrastructure information. The engineering designer

will be required to complete an NDA with Witt O'Brien's prior to the information delivery.

38. Where can we find the benchmark for conduit rental prices? Does the PRBP have a reference that we can use?

    This is the responsibility of the applicant.

39. In the operation phase, is it under a revenue share model or will the awarded operator have access to all the resources that come in for reasons of leasing spaces in the conduits?

    The cost of the operation and maintenance of the conduit network will be paid by the leasing revenue. A discussion of these costs is required for the Affordability Scoring Category. The government entity responsible for the conduit network may require funding for the long-term depreciation of the conduit network to be included in the final approved lease rates.

40. Regarding the BEAD Program Outlay score, is it possible to have this cost-per-mile reference before submitting the proposal? If a company has not participated in the BEAD processes, will it have a lower score than the others?

    There has been no past BEAD program, so all applicants start on a level field. Since the Minimum BEAD Program Outlay is a scored section, no cost reference can be provided.

41. What is the defined time for those 3 bidding phases shown in the scores?

    Per the NOFA Response Evaluation Section 8 language, published on October 23, 2024, 'The Government Entities will examine all Responses in a proper, objective, and timely manner to determine if the NOFA requirements are met. The scoring criteria are presented by the Initial Application Round (Round 1) and Best and Final Applications (Round 2). The Government Entity will determine the need for the Best and Final applications based on applications received during the Initial Application Round.' The Notice of Provisional Award in the Timeline Section is December 20, 2024, pending NTIA Approval.

42. Please confirm how many conduits will be accepts within the underground conduit system?

    The awarded applicant design engineer will determine the final number of conduits based on the discovery process outlined in the NOFA.

43. Please confirm which location arrive the underground conduit system?

    The design and construction of the conduit network will accommodate connection to 3 planned landing sites on the South, East, and West of the island, as well as an existing landing site on the north of the island. As the routes are being planned, attention should be paid to the FCC Broadband Availability mapping that shows the locations of the unserved and underserved areas of the island. Routes should be planned to allow the conduit to be used to enable new fiber optic service to be brought to these areas as well as unserved CAIs and municipalities as outlined in the NOFA.

44. Please confirm if could only quote one phase of the project?

    While an application for all phases is desired, applications for individual phases will be considered, per the NOFA Introduction Section language published on October 23, 2024, 'The Government Entities invite Applicants to submit their proposals to all Phases or a single Phase of this NOFA.'

45. Please confirm if there are any schedule value form to delivering price breakdown or total price?

    Total Project Costs provided by phase is required. Costs should be provided as separate labor and material lines.

46. Please provide the location of three (3) planned and one (1) existing landing stations of submarine cable.

    These locations will be provided during the design phase, and the conduit will be routed appropriately. The preliminary landing station locations are identified as Ponce, San Juan, Humacao, and Aguadilla. However, these sites are subject to change based on further analysis, and their final selection will depend on the results.

47. Please confirm if there is an existing project to create a route to connect landing points, also provide owner and Point of contact.

    These locations will be provided during the design phase, and the conduit will be routed appropriately.

48. For the appropriated Feasibility analysis, please confirm the Primary Rout is the Interconnection of Landing Stations and a secondary strategic conduit route is to reach other users?

    The design and construction of the conduit network will accommodate connection to 3 planned landing sites on the South, East, and West of the island, as well as an existing landing site on the north of the island. As the routes are being planned, attention should be paid to the FCC Broadband Availability mapping that shows the locations of the unserved and underserved areas of the island. Routes should be planned to allow the conduit to be used to enable new fiber optic service to be brought to these areas as well as unserved CAIs and municipalities as outlined in the NOFA. The preliminary landing station locations are identified as Ponce, San Juan, Humacao, and Aguadilla. However, these sites are subject to change based on further analysis, and their final selection will depend on the results.

49. Confirm if acceptable to overestimate in proposal the secondary strategic conduit route is to reach other users last mile access, during Rough Order of Magnitude (ROM), after development of conception to a High-Level Design (HLD), Proposal might be adjusted with the validation of multiple users that require access to conduit Route.

    The design and construction of the conduit network will accommodate connection to 3 planned landing sites on the South, East, and West of the island, as well as an existing landing site on the north of the island. As the routes are being planned, attention should be paid to the FCC Broadband Availability mapping that shows the locations of the unserved and underserved areas of the island. Routes should be planned to allow the conduit to be used to enable new fiber optic service to be brought to these areas as well as unserved CAIs and municipalities as outlined in the NOFA. Pricing should be developed to meet these objectives.

50. For the question above, in case that potential users do not participate or do not provide requirements should design for the only confirmed users, or the design might consider all potential users, for future interest.

    The HLD should include assumptions and limitations for the conduit network including future anticipated use.

51. Confirm if acceptable to overestimate in proposal the resilient duct protection in bridges with directional Buried duct, during Rough Order of Magnitude (ROM), after development of conception to a High-Level Design (HLD), Proposal might be adjusted with standard trenching or bridge attachment if risk is minimized.

    The awarded design engineer will be responsible for the design and layout of the conduit network. It is expected that revisions from the pre-construction planning phase will be required during the design phase as specific impediments to the conceptual layout are uncovered. The design engineer will work with the awarded contractor to develop solutions and present them to the Government Entity.

52. Confirm if acceptable to overestimate in proposal the use restoration Manhole / Handhole, on each Bridge or dangerous crossing like Gas, Oil, electricity, or oversized water ducts during Rough Order of Magnitude (ROM) after development of conception to a High-Level Design (HLD) Proposal might be adjusted if analyzed as minimum risk.

    The awarded design engineer will be responsible for the design and layout of the conduit network. It is expected that revisions from the pre-construction planning phase will be required during the design phase as specific impediments to the conceptual layout are uncovered. The design engineer will work with the awarded contractor to develop solutions and present them to the Government Entity.

53. Confirm if acceptable to overestimate in proposal the secondary strategic conduit route is to reach areas currently lacking or having minimal access to broadband technologies during Rough Order of Magnitude (ROM) after development of conception to a High-Level Design (HLD) Proposal might be adjusted if approved by Smart Island

The design and construction of the conduit network will accommodate connection to 3 planned landing sites on the South, East, and West of the island, as well as an existing landing site on the north of the island. As the routes are being planned, attention should be paid to the FCC Broadband Availability mapping that shows the locations of the unserved and underserved areas of the island. Routes should be planned to allow the conduit to be used to enable new fiber optic service to be brought to these areas as well as unserved CAIs and municipalities as outlined in the NOFA. Pricing should be developed to meet these objectives.

54. Confirm if acceptable to overestimate in proposal the secondary strategic conduit route to have redundancy in populations and urban zones, while interested users provide the logical transmission path during Rough Order of Magnitude (ROM) after development of conception to a High-Level Design (HLD) Proposal might be adjusted with information provided by users

    The design and construction of the conduit network will accommodate connection to 3 planned landing sites on the South, East, and West of the island, as well as an existing landing site on the north of the island. As the routes are being planned, attention should be paid to the FCC Broadband Availability mapping that shows the locations of the unserved and underserved areas of the island. Routes should be planned to allow the conduit to be used to enable new fiber optic service to be brought to these areas as well as unserved CAIs and municipalities as outlined in the NOFA. Pricing should be developed to meet these objectives.

55. Smart Island will participate getting owners authorization to the use of existing infrastructure, and if not will authorize the design of new Duct Infrastructure?

    The NOFA discusses the desire to utilize existing infrastructure where possible and where the infrastructure owner is willing to allow its use based on the open access conditions outlined. The Government Entity will support the discussions with the existing infrastructure owner, the awarded design engineer, and the contractor.

56. The size of Manhole / Handhole is going to be designed according the confirmed users? Or must consider the potential future users.

    The HLD should include assumptions and limitations for the conduit network including future anticipated use.

57. Confirm if required provide a minimum one-gigabit symmetrical lit service for public schools.

    The goal of this project is to build the conduit network close to the CAIs rather than to provide direct service to the CAIs. The plan is to get as close to the CAIs as possible, allowing for service through providers once the conduit is complete. Where possible, provisions will be made to allow last-mile providers to utilize the conduit network to reach the CAIs.

58. About Capturing the current landscape of broadband infrastructure and environmental and regulatory compliance requirements is in additional blue print? Or must be merged in same drawings and blue prints.

    The awarded design engineer will be responsible for the design and layout of the conduit network and the creation of the construction documents necessary for construction.

59. Please provide details of blueprints required.

    Deliverables for each Engineering Design sub-phase are included in Appendix 1. Phasing Responsibilities.

60. Please provide Details of Warning tape to be used.

    Local laws, as well as industry best practices and the NEC, will be used to determine the Details of Warning Tape requirements, and we expect the requirements to be similar to those of other conduit installations or construction projects.

61. Please provide details and required standards for visible signs (Cott markers) to be used on roads.

Local laws, as well as industry best practices and the NEC, will be used to define the requirements for visible signs (Cott markers) to be used on roads, and we expect the requirements to be similar to those of other conduit installations or construction projects.

62. Please confirm the project will require induction cable for radio detection of buried ducts, and provide details.

    The selected design engineer will determine if the project requires an induction cable for radio detection of buried ducts and requirements during the design phase. We expect the requirements to be similar to those of other conduit installations.

63. For previous question, please confirm if Grounding is going to be required, also provide if a special Frequence is going to be required.

    The selected design engineer will determine if the project requires grounding or if special frequencies will be utilized during the design phase. We expect the requirements to be similar to those of other conduit installations.

64. Please provide duct details required standards, material, diameter, confirm layout.

    The selected design engineer will define the duct details, required standards, material, and diameter and confirm layout requirements during the design phase. We expect the requirements to be similar to those of other conduit installations.

65. Please provide requirements for bold, Manholes, Handholes.

    The selected design engineer will define the requirements for Bold, Manholes, and Handholes requirements during the design phase. We expect the requirements to be similar to those of other conduit installations.

66. Please confirm if will be allowed the use of Manholes / Handholes to use splicing cases and, if allowed the spare cable inner the Bolds.

The selected design engineer will define all requirements allowed for the use of Manholes / Handholes for use in splicing cases during the design phase. We expect the requirements to be similar to those of other conduit installations.

67. Regarding previous question, if not allowed confirm if users shall use an independent box for splicing an spare cable storage.

    The selected design engineer will define requirements allowed for the use of an independent box for splicing and spare cable storage during the design phase. We expect the requirements to be similar to those of other conduit installations.

68. Smart Island will provide support to get construction Permits?

    Permitting is the responsibility of the awarded contractor with assistance from the design engineer. The Government Entity will support the permitting process where possible.

69. Construction Timeline, can be separated from Permits phase?

    Permitting is part of the Construction phase as outlined in Appendix 1. Phasing Responsibilities. Permitting should be included in the construction timeline.

70. What are the trenching requirements?

    The selected design engineer will define the trenching requirements during the design phase. We expect the requirements to be similar to other conduit installations.

71. What happens if there are obstructions that prevent underground installation?

    These situations should be discovered during the design phase and the conduit network will be routed appropriately.

72. Is the conduit network expected to terminate at the CAI's?

No, this is a middle-mile project. Where possible, provisions will be made to allow last-mile providers to utilize the conduit network to reach the CAIs.

73. What is the final position, a single entity or multiple entities?

The PRBP believes that the Design-Build is the most cost-effective method with a single entity. However, applicants can apply for the Phase(s) they choose.

74. Have we assessed to determine if there is a single entity to win the whole island?

No assessment has been made. We are expecting a joint venture or partnership to come in as a single applicant – a team coming together to respond to all the phases.

75. Is there a minimum budget to complete one area of the island only?

No, applicants may apply for a specific Project Phase only. We are not allowing a regional response for a portion of the island within a phase. Contractors could join to complete a phase, such as a region of construction.

76. How are route planning and de-duplication of infrastructure being addressed?

We are gathering information through the EOI/RFI. The information will be provided to the awarded engineer for the planning and design phase of the project. This is a middle-mile project, not a last-mile project, so duplication of the last mile is not as much of an issue. The final design will investigate and use existing infrastructure for the conduit where possible.

77. Covering the CAIs – is there a final number?

There is no final number, and the goal is to build close to the CAIs, not to provide direct service to the CAIs. The plan is to get as close to the CAIs as possible, allowing for service through providers once the conduit is complete.

78. Does the construction and/or engineering firm need to be local?

    No, but it must abide by the Puerto Rico licensing requirements. For construction, we expect many of the workers and subcontractors to be local.

79. Please clarify the Letter of Credit (LOC).

    The LOC or Performance Bond does not need to be provided until the project goes to award. The NOFA requires an attestation that the applicant understands this requirement.

80. Are there pre-requirements for the LOC?

    At the time of application, the requirement is to indicate an understanding of the LOC or Performance Bond requirements as outlined by NTIA.

81. Is there a current design for the conduit to be shared?

    No, at this time, there is no design to be shared. If you partner with a design firm, they can provide guidance on conceptual design.

82. In previous meetings, the PRBP had a high-level conduit design, which is what he is referring to. Do you have that design?

    A map was previously shown for illustrative purposes only, highlighting the existing road networks. There is no high-level conduit network design available. The applicant should work with their design engineer to develop the high-level layout necessary for the NOFA response.

83. Is there information on the location of the data centers? It is difficult to design the conduit without knowing where some of these items are located.

    This information is not currently available.

84. Which CAIs should be chosen?

CAI locations to be accommodated would be chosen in the design phase. The intent is to be as close as feasible while developing the most judicious design.

85. For the network to be feasible, the CAIs are mostly in San Juan and other populated areas. This effort has been attempted for 10 years and has died in these details.

The CAIs most important to PRBP are those outside of San Juan because they are unserved CAIs.

86. Where do they find the unserved and underserved locations?

We do not have a map of the areas, but applicants can use the FCC broadband maps to determine which addresses are unserved and underserved.

87. Where do they find preliminary route information to develop a route design?

There is no conduit network design available. The applicant should work with their design engineer to develop the high-level layout necessary for the NOFA response.

88. Can they propose a route that connects the marine landings?

An area of interest that interconnects the marine landing areas is mostly there. However, the project cannot focus only on those areas.

89. To connect the landing stations, will we need to connect point to point?

To connect the locations across the island, the project must provide multi-point connections, enabling future service to localities across the island.

90. If strategic connecting points along the route are created, will that enable connections later?

Yes, provide handholds or manholes at strategic locations along the route, which allow for future connections and service.

91. What are the expectations for connecting the existing main landing stations and the to-be-built landing stations?

The conduit network is to be an end-to-end solution across the island.

92. Can we get the locations for the new to-be-built landing stations?

The design and construction of the conduit network will accommodate connection to 3 planned landing sites on the South, East, and West of the island, as well as an existing landing site on the north of the island. As the routes are being planned, attention should be paid to the FCC Broadband Availability mapping that shows the locations of the unserved and underserved areas of the island. Routes should be planned to allow the conduit to be used to enable new fiber optic service to be brought to these areas as well as unserved CAIs and municipalities as outlined in the NOFA. The preliminary landing station locations are identified as Ponce, San Juan, Humacao, and Aguadilla. However, these sites are subject to change based on further analysis, and their final selection will depend on the results.

93. Can the applicant bid for all phases or just a single phase?

The expectation is a joint venture or a single phase, but it must complete the entire phase.

94. Do they need to provide a complete route now?

No, it is acceptable to provide a concept now and provide budgets based on the concept (estimates). Then, present the information in the application as follows: consulted with an engineer, developed a route concept, and the budget provided is based on the concept.